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EPH168 REGIONAL VARIATION IN PATIENT CHARACTERISTICS AND TREATMENT PATTERNS FOR OVER 17 MILLION COVID-19 PATIENTS IN THE UNITED STATES

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Objectives: According to the CDC, as of December 2022, almost one in three Americans had confirmed COVID-19 infection; yet only a small portion generated healthcare claims related to COVID-19. Higher burden of COVID-19 cases in Northeastern states compared to other US regions has been documented. This study examined the regional variation in demographic characteristics and treatment patterns among patients with a claim for COVID-19 in a nationwide US claims database. **Methods:** Analysis of data from over 277 million patients in IQVIA's longitudinal medical and pharmacy claims databases resulted in a cohort of 17,682,111 patients with COVID-19 diagnosis between 4/1/2020 and 4/30/2022. Demographic characteristics and treatment rates for key approved and un-approved COVID-19 therapies were assessed and stratified by region. **Results:** Among patients in the database, 6.4% had a COVID-19 diagnosis. The proportion was higher in the Northeast (7.1%) and South (6.9%) compared with the West (4.8%). The highest proportion of patients were aged 18-44 years (32.7% in South to 35.2% in West). Over a fifth of the patients were ≥ 65 years old (US overall = 23.7%; 22.5% in Northeast to 25.8% in Midwest). Approximately 57% of the patients nationally and within each region were women. For approved medications, utilization ranged from 1.7% in Northeast to 2.7% in Midwest (overall: 2.2%) for remdesivir; 0.7% in Northeast to 2.2% in South (overall: 1.5%) for casirivimab/imdevimab. For unapproved medications, utilization ranged from 0.9% in Northeast to 1.6% in South (overall: 1.3%) for hydroxychloroquine and 0.4% in Northeast to 1.8% in South (overall: 1.1%) for ivermectin. **Conclusions:** Less than one in five US cases of COVID-19 had a claim with diagnosis of COVID-19. Use of COVID-19 specific medications remained low throughout the pandemic. Despite the higher disease burden, proportion of patients with claims and receiving COVID-19 treatment were low nationally, particularly in the northeast US region.



EPH169 PERSONS DIAGNOSED WITH COVID-19 IN LINKED CLINICAL PRACTICE RESEARCH DATALINK (CPRD) – HOSPITAL EPISODE STATISTICS (HES) DATA: A COHORT DESCRIPTION

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Objectives: Clinical Practice Research Datalink (CPRD) Aurum captures primary care electronic healthcare records for ~28% of the population in England. From August 2020–March 2022, all SARS-CoV-2 polymerase chain reaction (PCR) tests performed were reported back to the patient's general practitioner (GP), making the CPRD a closed system uniquely positioned to answer COVID research questions. **Methods:** We defined persons with COVID as those recorded in primary care with a positive PCR test from August 1, 2020–March 31, 2021. We required continuous registration with their GP practice for ≥ 365 days prior to diagnosis to establish comorbid conditions, and eligibility for linkage to Hospital Episode Statistics (HES) Admitted Patient Care data. Hospitalizations for COVID were defined as persons admitted with a primary diagnosis of COVID (ICD-10-CM U07.1) within 12 weeks of the initial primary care diagnosis record. **Results:** Our cohort included 535,453 persons diagnosed in primary care with COVID, with 2% later hospitalized. The hospitalized group was 57% male, 42% current/former smokers, 35% obese, 46% with a Charlson Comorbidity Index >1 and 98% had never received any COVID vaccine. Hospitalizations increased with age; $<0.1\%$ of patients aged 1–17, 1% aged 18–49, 4% aged 50–64, 9% aged 65–74, 13% aged 74–84, and 11% of COVID cases aged ≥ 85 were hospitalized. Persons living in socially disadvantaged areas were overrepresented in the hospitalized cohort (25% in the Index of Multiple Deprivation's most deprived quintile). **Conclusions:** Consistent with other studies, hospitalized COVID patients were disproportionately those with male sex, smoking history, high body mass index, comorbidity and unvaccinated status. Hospitalizations were more common with age, and for individuals living in socially and economically deprived communities. Understanding the demographic and clinical characteristics of this cohort can help contextualize future work describing healthcare resource utilization and costs, as well as the impact of vaccines, associated with COVID in England.



EPH170 DIAGNOSES OF LONG COVID IN THE UNITED STATES: ANALYSIS OF A LARGE CLAIMS DATABASE

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Objectives: To assess newly diagnosed long COVID in a large US claims database. **Methods:** New diagnoses of long COVID from 01Apr2020 to 30Sep2022 were identified in a large US claims database. Long COVID was defined as having either (1) ICD-10 code U07.1 or U07.2 (COVID-19 with and without laboratory test, respectively)



followed by ICD-10 code B94.8 (sequelae of other specified infectious and parasitic diseases), or (2) ICD-10 code U09.9 (post COVID-19 condition, effective since 01Oct2021). **Results:** During the study period, 998,532 patients were diagnosed with long COVID. The majority (818,898 patients, 82%) were diagnosed from 01Oct2021 onwards, of whom 796,269 (97%) with the U09.9 ICD-10 code. The number of new U09.9 diagnoses peaked between January and March 2022, with 7,988 new diagnoses on 31Jan2022 alone, the highest on any single day. Still 196,602 patients received a new U09.9 diagnosis in the three months preceding data cutoff (July through September 2022), representing a quarter of all patients receiving this diagnosis code. The overwhelming majority of patients (94%) were diagnosed on weekdays. Patients with a U09.9 diagnosis had a mean age of 51.9 years (SD 19.3), 63% were aged <60 years, 4% were aged <15 years, and 62% were women. **Conclusions:** These results reflect long COVID diagnoses in the normal care setting in a population of individuals with health insurance coverage in the US. More women than men received a long COVID diagnosis, which confirms previous research. More than half of diagnosed patients belong to the working-age population. The wave of new long COVID diagnoses seen in this analysis between January and March 2022 directly followed a wave of new COVID-19 cases in the United States (CDC data). That most patients were diagnosed on weekdays may be explained that these diagnoses are made mostly in the non-acute care setting.

EPH172 REAL-WORLD TRENDS OF PATIENTS WITH SYPHILIS IN JAPAN USING INTEGRATED DATA OF IQVIA CLAIMS, JAST DATA AND DESC DATABASE

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Objectives: To clarify the real-world trends and treatment duration of patients with 1st and 2nd stage syphilis using integrated data of IQVIA Claims, JAST and DeSC database. **Methods:** Patients with syphilis (ICD-10: A51, A52) and corresponding treatment who have 6 months follow-up and 6 months look-back period in the IQVIA Claims, JAST and the DeSC database were identified. IQVIA Claims and JAST database contains the payer claims data of the health insurance union for Japanese workers. The DeSC database contains national health insurance (provided for individuals below 75 years of age who are not covered by other public health insurance); and later-stage elderly healthcare system (provided for individuals over 75 years old). The data period was between April 2015 and June 2022. Patients' demographics, treatment duration, and HCRU were described. **Results:** Of 440 patients with definitive diagnosis of syphilis who received syphilis treatment (Amoxicillin, Benzylpenicillin, Spiramycin, Minocycline), 342 (77.7%) patients were male, and 98 (22.3%) patients were female. Mean(SD) age for male and female was 42(12.5) and 35.4(15.2), respectively, whereas the median(1st quantiles, 3rd quantiles) was 41(32, 51) and 31(24, 43), respectively. The majority of patients were treated with oral penicillin. Mean treatment duration was 38.2 days in all patients and 38.8 days in 1st stage syphilis patients, whereas the median was 28 days and 29 days, respectively. **Conclusions:** The majority of patients with syphilis was male in our study, which is consistent with the reported cases by WHO (2022). The patients in our study were slightly older compared to the report by WHO, who were in the late 20s in the US. To our knowledge, this is the first time report about the treatment, frequency of test and HCRU for patients with syphilis in Japan real-world setting. Further details will be discussed in the poster.



EPH174 TRENDS IN POSTPARTUM DEPRESSION BEFORE AND DURING THE COVID-19 PANDEMIC AND CORRELATES OF TREATMENT CHOICES: A POPULATION-BASED RETROSPECTIVE COHORT STUDY

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Objectives: COVID-19-related stressors – including social distancing, material hardship, increased intimate partner violence, and loss of childcare, among others – may result in a higher prevalence of depression among postpartum individuals. This study examines trends in postpartum depression in the US from 2018 to 2022, as well as correlates of treatment choices among women with postpartum depression. **Methods:** 1,108,874 women aged 14–64 in the Komodo Healthcare Map with 1+ live birth between April 2018 and December 2021 and had continuous enrollment 2+ years before and 4+ months after the delivery date were included. Prevalence of depression during postpartum (within 3 months after delivery) was calculated before (April 2018–March 2020) and during (April 2020–March 2022) COVID-19. Multinomial logistic regression was used to investigate correlates of treatment choices (no treatment, medication-only, psychotherapy-only, or both). **Results:** The prevalence of postpartum depression increased from 9.7% pre-pandemic to 12.0% during the pandemic ($p < 0.001$). Among 119,788 women with postpartum depression in 2018–2022, 47.0% received no treatment, 35.0% received medication-only, 10.0% received psychotherapy-only, and 7.4% received both within one month following their first depression diagnosis. Factors associated with an increase in the odds of receiving medication-psychotherapy treatment (vs. no treatment) included

